D.C. Nautiyal and R.D. Gaur ${ }^{2}$

(With one text-figure)
Key words: Poa garhwalensis sp. nov. Poa gammieana, Garhwal, Himalaya
Plant explorations in the Garhwal Himalaya yielded a new species Poa garhwalensis Nautiyal et Gaur. sp. nov. This was collected at the Indo-Tibetan border of Chamoli district. It comes close to Poa gammieana Hook. f.

During the recent plant explorations in the remote localities of Garhwal Himalaya, we collected some interesting specimens of the genus Poa from an alpine zone, Leptal, at the Indo-Tibetan border of Chamoli dist. Critical analysis and comparison of these specimens with the literature as well as material from the Herbaria of Botanical Survey of India (BSD), and Forest Research Institute (DD), Dehra Dun, distinctly warranted a new species, which has been described hereunder.
Poa garhwalensis Nautiyal et Gaur sp. nov.
Haec species Poa gammieana Hook. f. affinis, a qua differt habitu minus foliaceo, cum internodis 1 vel 2, ligulis brevioribus, $1.5-3 \mathrm{~mm}$ longis, panicula laxa, ramis inferioribus 3-5, scabridis, spiculis ellipticis, $5-11 \mathrm{~mm}$ longis, cum flosculis 3-7(8), rhachilla breviore, $0.5-0.8 \mathrm{~mm}$ longa, lemma acuto, $4-4.5 \mathrm{~mm}$ longo, paleae carinis scabridis, anthera longiore, $2-2.5 \mathrm{~mm}$ longa.

Typus: Northwest Himalaya, Leptal (4000m), August 4, 1996. Coll. D.C. Nautiyal, Holotypus GUH: 13501 A ; Isotypus 13501B.

This species is allied to $P$. gammieana Hook. f., and a comparison of both the species is given in Table 1 with a description of the new taxon.

Perennial tufted grass; culms erect, $45-60 \times 0.3 \mathrm{~cm}$, partly terete, smooth; nodes 2 . Leaf blade linear, acute, $4-10 \times 0.2-0.3 \mathrm{~cm}$, scabrid on both surfaces as well as margins; sheaths keeled, $10-20 \mathrm{~cm}$ long; ligules ovate-obtuse, $1.5-3 \mathrm{~mm}$ long. Panicles lax, 4-10×3-4 cm; branches spreading, axis cylindrical, scabrid, lower branches $3-5$, scabrid; pedicels scabrid; spikelets elliptic, $5-11 \mathrm{~mm}$ long, 3-8 flowered, pale-green or purplish. Lower glumes oblong, acute, 3-3.2 mm long, 3 -nerved, margins hyaline, surface glabrous, keel scabrid on upper part; upper glumes narrowly oblong, 3.2-3.8 mm long, 3-nerved,

Table 1
COMPARISON OF THE KEY FEATURES OF POA GAMMIEANA AND P. GARHWALENSIS
Poa gammieana Hook. f. P. garhwalensis sp. nov.

1. Culms leafy throughout with 7-8 internodes.
2. Ligules oblong-acute, $3.5-4 \mathrm{~mm}$ long.
3. Panicles narrowly spreading; lower branches 2 , smooth.
4. Spikelets oblong-lanceolate, 5.5-9.2 mm long, 3-4 flowered.
5. Margins of glumes hardly hyaline; palea keels semipilose.
6. Anthers $1.1-2 \mathrm{~mm}$ long.
[^0]1. Culms with 2-3 leaves and 1-2 internodes.
2. Ligules ovate-obtuse, $1.5-3 \mathrm{~mm}$ long.
3. Panicles loosely spreading; lower branches $3-5$, scabrid.
4. Spikelets elliptic, $5-11 \mathrm{~mm}$ long, 3-8 flowered.
5. Margins of glumes hyaline; palea keels almost scabrid.
6. Anthers 2-2.5 mm long.
margins hyaline, surface glabrous, keel scabrid above. Rhachilla 0.5-0.8 mm long, scabrid. Callus with ciliate hairs. Lowest lemma oblong, acute, 4-4.5 mm long, 5-nerved, surface scabrid


Fig. 1: A-G. Poa garhwalensis Nautiyal et Gaur sp. nov. A. Plant; B. Spikelet; C. Lower glume; D. Upper glume; E. Lowest lemma; F. Palea; G. Anthers, ovary, styles, stigmas and lodicules.
except hyaline tip, margins hyaline, keel ciliate on lower two-thirds, scabrid above, marginal nerves ciliate on lower half. Paleas elliptic-oblong, 3.2-4 mm long, keels almost scabrid. Stamens 3; anthers 2-2.5 mm long. Ovary with distinct styles and stigmas. Lodicules $2,0.5-0.8 \mathrm{~mm}$ long. (Figs. 1A-G).

F1. \& Fr.: Aug.-Oct.
Habitat: In marshy alpine meadows.

## Acknowledgements

We thank the Botanical Survey of India, Northern Circle, Dehra Dun and Forest Research Institute, Dehra Dun for Herbarium and Library facilities; Dr. N.C. Majumdar for Latin diagnosis of the taxon and the Council of Scientific and Industrial Research (CSIR), for financial assistance.


[^0]:    'Accepted August 1997
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